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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,667	07/15/2003	Fabrice Le Leannec	01807.002379.	5897

5514 7590 10/27/2008
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EXAMINER

DAILEY, THOMAS J

ART UNIT	PAPER NUMBER
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2452

MAIL DATE	DELIVERY MODE
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10/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,667	Applicant(s) LE LEANNEC ET AL.	
	Examiner Thomas J. Dailey	Art Unit 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-27, 29-36, 39, 40, 43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-27, 29-36, 39-40, and 43-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 11, 2008 has been entered.
2. Claims 11, 28, and 41-42 were cancelled by the amendment filed on August 11, 2008.
3. Claims 1-10, 12-27, 29-36, 39-40, and 43-44 are pending.

Response to Arguments

4. The amendments entered have alleviated the 35 U.S.C. 112 second paragraph rejections directed at claims 1-11, 23-28, 39, 41, and 43 and those rejections have been withdrawn.
5. Applicant's arguments with respect to the prior art rejections of the claims filed August 11, 2008 have been fully considered but they are not persuasive.
6. The applicant argues with respect to claim 1 that Boliek (US Pub. No. 2003/0018818) fails to disclose forming a pointer marker that is inserted into the header data of the signal. Specifically asserting that "nothing in Boliek relates to

forming a pointer marker from the data structure location data and then inserting that pointer marker into the header data of the signal." Thus, it is the applicant's conclusion that, "Boliek fails to teach or reasonably suggest, 'forming, prior to the processing, the at least one pointer signal when such a marker is not present in the signal,' as recited by amended Claim 1." The applicant further contends that, "Boliek fails to teach or reasonably suggest forming such a pointer marker at the claimed 'second apparatus' of claim 1."

7. The examiner disagrees. In [0033], Boliek discloses, "There is a main header at the beginning of the codestream. This header contains markers that describe the image characteristics and the coding style and other parameters that apply to the whole image or individual components." This codestream is located at the server (second apparatus) and is requested by a client (first apparatus) ([0039]). This codestream is necessarily stored at the server before the client requests it, and therefore the markers contained in the main header are formed prior to the client's (first apparatus) request.
8. Further, the applicant argues with respect to claim 12 that Boliek fails to disclose that the original pointer markers received at the first communications apparatus are relied upon to position each received packet from a signal and does not position packets based on modified pointers. Specially, the applicant cites paragraphs 45 and 46 of Boliek which give illustrative examples when "only a

portion of the codestream may have been requested, the client modifies the markers so that the markers are correct for the codestream that is generated as a result of the integration process ([0046], lines 9-13).

9. The examiner disagrees. Firstly, the applicant has cited portions of Boliek which disclose exemplary embodiments of the system, and notes that the situation the applicant has pointed to "may" occur and occurs when "only a portion of the codestream" has been requested. Therefore the examiner maintains that Boliek discloses:

determining a position at which the at least one data packet is to be inserted into the body of a compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream) derived from the compressed digital signal present in the second apparatus ([0039], original codestream (compressed digital signal) is stored at server (second apparatus)) and which is capable of containing all or part of the body of this compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream), the derived signal also comprising header data ([0052], main header), the position being determined as a function of at least one pointer marker previously received and inserted into header data of the signal by the first apparatus ([0052], once main header data, which includes markers is received, positions of every data packet and therefore their insertion point are known; [0059] further illustrates this process), the at least

one pointer marker providing information for calculating the length of the part of the body preceding the at least one data packet ([0052] and [0057] further illustrating this process).

Claim Objections

10. Claim 12 and 40 recites, “determining a position at which the at least one data packet is to be inserted into the body of **a compressed digital signal derived from the compressed digital signal present in the second apparatus** and which is capable of containing all or part of the body of **this compressed digital signal, the derived signal** also comprising header data, the position being determined as a function of at least one pointer marker previously received and inserted into header data of **the signal** by the first apparatus the at least one pointer marker providing information for calculating the length of the part of the body preceding the at least one data packet.”

In order from the claim to be clearer, “**the signal**” should be recited as, “the derived signal” so as to give it clear antecedent basis.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-10, 12-27, 29-36, 39-40, and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US Pub. No. 2003/0018818), hereafter "Boliek" in view of what is well known in the art.

13. As to claim 1, Boliek discloses a method of processing a request coming from a first communication apparatus connected through a communication network to a remote second communication apparatus, the method being implemented in the second apparatus (Abstract), the method comprising the steps of:

receiving the request, wherein the request is for obtaining digital data of a compressed digital signal that comprises header data and a signal body comprising data packets ([0039] and [0033] discloses that the codestream (digital data) comprises a main header and tiles that make up the signal body; client (first apparatus) requests all or portion of code stream (digital data) from server (second apparatus));

processing the request including determining a position, in the body of the signal, of at least one data packet corresponding to the request ([0043], the client request specific ranges of bytes in the codestream using the starting point in memory, i.e. the position in the body of the codestream, thus when the server processes the incoming request it determines the position in the body of the signal of corresponding data packets); and

forming prior to processing, the at least one pointer marker in the signal when such a marker is not present in the signal ([0033], header contains makers that describe the image characteristics that apply to the whole image or individual components and the codestream is located at the server (second apparatus) and is requested by a client (first apparatus) as disclosed in [0039]).

However, Boliek may not explicitly disclose that the position is determined as a function of the length of the header data and of at least one pointer marker present in the header data of the signal, the at least one pointer marker providing information for calculating the length of the part of the body preceding the data packet under consideration. Boliek does disclose the request indicates the position of the data packets in memory ([0043]), but does not disclose what the memory locations are relative to (e.g. the server or the codestream). However, one of ordinary skill in the art would with it as obvious to use either memory locations relative to the server or to the codestream as this is a common practice in the art when requesting data (i.e. requesting data based on its location relative to the memory of the sending device or its location relative to the transmitting stream of data). As Boliek has disclosed the structure of a codestream (Fig. 4 and [0057]) and the functions of header data ([0033]) and pointer markers ([0052]), simply having the request indicate the position of a data packet relative to the codestream would make that position of a function of the length of the header data and of at least one pointer marker present in the header data of the

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signal. Therefore it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use memory locations relative to the codestream in the request to simplify the retrieval procedure of requested data packets.

14. As to claim 12, Boliek discloses a method of processing compressed digital data received by a first communication apparatus connected through a communication network to a remote second communication apparatus, the method being implemented in the first communication apparatus, (Abstract), the method comprising the steps of:

receiving at least one data packet coming from a compressed digital signal present in the second apparatus and comprising a body that comprises data packets ([0042], lines 5-12, client (first apparatus) requests an image (compressed digital signal) from a server(second apparatus)):

determining a position at which the at least one data packet is to be inserted into the body of a compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream) derived from the compressed digital signal present in the second apparatus ([0039], original codestream (compressed digital signal) is stored at server (second apparatus)) and which is capable of containing all or part of the body of this compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream), the derived signal also

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comprising header data ([0052], main header), the position being determined as a function of at least one pointer marker previously received and inserted into header data of the signal by the first apparatus ([0052], once main header data, which includes markers is received, positions of every data packet and therefore their insertion point are known; [0059] further illustrates this process), the at least one pointer marker providing information for calculating the length of the part of the body preceding the at least one data packet ([0052] and [0057] further illustrating this process) and

inserting into the body of the derived signal said at least one data packet at the determined position ([0045]).

However, Boliek may not explicitly disclose the position being determined as a function of the length of the header data. But, since Boliek does disclose pointer markers indicating the length and starting point of every packet in the codestream ([0052]), simply making the insertion position a function of the length of the header data is an obvious and unsubstantially modification of Boliek to one of ordinary skill in the art as the pointer markers can accomplish this alone.

15. As to claims 23, 39, and 43, they are rejected by the same rationale set forth in claim 1's rejection.

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16. As to claims 29, 40, and 44, they are rejected by the same rationale set forth in claim 12's rejection.

17. As to claims 2 and 24, Boliek discloses the determination of the length of the part of the body of the signal preceding the data packet under consideration comprises a preliminary step of determining the order of appearance of the data packet in the body of the signal, according to parameters relating to structure and organization of the data in the signal ([0033], lines 6-11).

18. As to claim 3, 14, 25, and 31, Boliek discloses the compressed digital signal is partitioned into a number n of independently compressed regions $t_{sub.i}$, $i=1$ to n and $n \geq 1$, the body of the signal comprising, for each region, region header data and a region body containing data packets of the region under consideration ([0033], tile-parts are the independently compressed regions and each tile-part has a header and body).

19. As to claims 4, 15, 26, and 32 Boliek discloses the length of the part of the body of the signal preceding the data packet under consideration is determined from:
at least one pointer marker PLT providing information for calculating the length of the data packet or packets preceding the data packet under consideration in the region where this packet is located ([0052]),

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the length of the header data of the region where the packet under consideration is located and, when one or more regions precede the region where the packet under consideration is located ([0052]).

at least one pointer marker TLM providing information for calculating particular the length of the preceding region or regions ([0052]).

20. As to claims 5 and 16, Boliek discloses the pointer marker TLM providing information for calculating the length of each region $t_{sub.i}$ is present in the header data ([0052] and [0060]).

21. As to claims 6 and 17, Boliek discloses the pointer marker PLT providing information for calculating the length of the data packets in a region $t_{sub.i}$ is present in the header data of the region concerned ([0052]) and [0061]).

22. As to claims 7 and 27, Boliek discloses extracting and transmitting to the first communication apparatus the at least one data packet having a position that has been determined ([0043]).

23. As to claim 8, Boliek discloses the request for obtaining digital data specifies at least one data packet of the signal ([0043]).

24. As to claim 9, Boliek discloses the request for obtaining digital data specifies part of the signal ([0043]).

25. As to claim 10, Boliek discloses subsequent to the request being received, the method comprises a step of identifying the data packet or packets necessary for the reconstruction of the part of the signal specified ([0042]).

26. As to claim 13 and 30, Boliek discloses:

receiving the header data coming from the original compressed digital signal present in the second apparatus, the received header data comprising at least one pointer marker TLM providing information for calculating the length of the body of the original signal ([0033] and [0042], lines 5-12),

forming, from the received header data, the derived compressed digital signal which thus comprises, as header data, the received header data and a signal body of length equal to that of the body of the original signal ([0045]), the body of the derived signal representing a space initially filled with arbitrary data and which is intended to contain the data packet or packets received from the second apparatus ([0045]).

27. As to claims 18 and 33, Boliek discloses:

receiving region header data ([0033] and [0042], lines 5-12),;

determining a position at which the received region header data is to be inserted into the body of the derived signal ([0033]), the position being determined according to the length of the header data of the derived signal and, when one or more regions precede the region header data concerned, according to one or more pointer markers TLM received previously and providing respectively the length of the preceding region or regions ([0052]); and inserting the received region header data at the determined position ([0045]).

28. As to claims 19 and 34, Boliek discloses the determination of the length of the part of the body of the derived signal preceding the data packet under consideration comprises a preliminary step of determining the order of appearance of the data packet in the body of the signal according to parameters relating to structure and organization of the data in the signal ([0045], and [0052]).

29. As to claims 20 and 35, Boliek discloses:

extracting from the derived signal the header data and data packets received ([0042]);

forming the header data of the valid signal from the header data extracted from the derived signal ([0050]);

concatenating the data packets extracted from the derived signal in the body of the valid signal ([0045]); and

when one or more data packets present in the body of the original signal are not received by the first apparatus, concatenating respectively one or more empty packets in the body of the valid signal in the same order of appearance as that adopted in the derived signal ([0042]-[0043]).

30. As to claims 21 and 36, Boliek discloses going through the data contained in the body of the derived signal ([0042]);

converting, when the data gone through do not correspond to a data packet received from the second apparatus, the space filled by the data concerned into an empty packet ([0042]); and

shifting in an adapted manner the data comprising the remainder of the body of the derived signal ([0050]).

31. As to claim 22, Boliek discloses the data received by the first apparatus comprises the reply to a request previously transmitted from the first apparatus to the second apparatus ([0042]).

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

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33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/Kenny S Lin/

Primary Examiner, Art Unit 2452